

REMARKS

Claims 1-4, 12-36, and 38 are pending in the application, with claims 12-32 and 34 withdrawn from consideration. Claims 1-4 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubenstein (U.S. 6,264,625) in view of Buchwald (U.S. 4,610,658); claim 33 is rejected as being unpatentable over Rubenstein in view of Buchwald and Burbank (6,193,684); claim 35 is rejected as being unpatentable over Rubenstein in view of Buchwald and Gorsuch (U.S. 5,980,478); and claim 38 is rejected as being unpatentable over Rubenstein in view of Buchwald and Treu (U.S. 6,254,567).

With this response, claims 1, 3, 4, 33, 35, 36, and 38 are amended; claims 39-44 are newly added; and claims 2, 12-32, and 34 are canceled. Support for the amendment to claim 1 and new claims 41-43 may be found, for example, at [0064] and FIG. 13. Support for the amendments to claims 3 and 4 may be found, for example, at [0011] and [0016]. Claims 33, 35, and 36 are amended to depend from claim 39, which recites limitations previously recited in claim 1. Support for the amendment to claim 38 may be found, for example, at [0013]. Support for new claims 40 and 44 may be found, for example, at [0016]. Applicant reserves the right to file one or more subsequent applications directed to the canceled subject matter. After entering the amendments identified herein, claims 1, 3, 4, 33, 35, 36, and 38-44 will be pending in the application.

Reconsideration of the claims as amended, in light of the remarks that follow, is respectfully requested.

No combination of Rubenstein, Buchwald, Burbank, Gorsuch, and Treu discloses or suggests:

an implantable pump configured to implanted subcutaneously in a peritoneal cavity so that *a portion of the implantable pump partially protrudes from the peritoneal cavity*; [and]

an external control module configured to be periodically coupled to the implantable pump, *the external control module*

having a feature configured to circumferentially engage the protruding portion of the implantable pump

as is recited in independent claim 1 as amended.

Instead, Rubenstein discloses an apparatus including a conduit and a flow rate control device attached to the conduit. Rubenstein discloses that FIG. 5A “shows an embodiment in which the fluid flow rate control device is an implantable pump 18” attached to the conduit (col. 7, lines 7-9). Rubenstein discloses that the power source for the pump may be a battery or other energy storage device, such as a mechanical flywheel with self-winding operation, and that the pump may be remotely operated, that it may be operated continuously or periodically (col. 7, lines 11-15). Rubenstein is silent on a portion of the pump partially protruding from the peritoneal cavity and an external control module having a feature configured to circumferentially engage the protruding portion of the implantable pump.

Buchwald, Burbank, Gorsuch, and Treu do not cure the deficiencies of Rubenstein. Buchwald is cited as disclosing anti-infective coatings (Office Action, p. 4). Buchwald discloses a magnetically coupled pump for performing peritoneal shunting (abstract). Buchwald discloses that the pump may be implanted under the skin and function in response to a magnetic field applied by an external magnet (col. 6, lines 4-6). Burbank is cited as disclosing an implantable shunt anchored to the abdominal wall of a patient using various implements (Office Action, p. 5). Burbank discloses the use of “large-bore, percutaneous access members to deliver and drain fluid from the peritoneal cavity,” e.g., dialysis fluid (col. 1, line 66 to col. 2, line 6). Burbank discloses that the dialysate may drain through gravity or using a pump. Gorsuch is cited as disclosing an anti-infective coating that prevents bacteria adhesion to the housing (Office Action, p. 5). Gorsuch discloses an apparatus for treatment of acute and chronic renal disease by continuous passive plasma ultrafiltration (abstract). Gorsuch discloses that a manually operated vacuum pump may be used to create a negative differential pressure across a plasma extraction membrane (col. 3, lines 60-65). Treu is cited as disclosing pressure sensors (Office Action, p. 6). Treu discloses a system for conducting peritoneal dialysis that includes a pumping assembly to circulate peritoneal dialysis solution through a peritoneal cavity (col. 1, line 64 to col. 2, line 2). Although Buchwald, Burbank, Gorsuch and Treu disclose pumps, each of the references is completely silent as to ***a portion of a pump partially protruding from the peritoneal cavity and***

an external control module having a feature configured to circumferentially engage the protruding portion of the implantable pump.

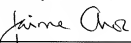
Thus, neither claim 1 nor any claim depending therefrom is obvious over any combination of Rubenstein, Buchwald, Burbank, Gorsuch, or Treu. Applicants respectfully request the Examiner to withdraw the rejection and allow the claims to issue.

The Examiner is invited to call the undersigned if a telephone call could help resolve any remaining items.

A petition for a 1-month extension of time accompanies this response, the fee for which will be paid via EFS-Web. No other fees are believed due at this time. However, please charge any required fees, or credit any overpayments, to Jones Day Deposit Account No. 50-3013.

Respectfully submitted,

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By: Jaime D. Choi, Ph.D. 59,198
IP Legal Intern (Reg. No.)
For: Nicola A. Pisano, Esq. 34,408
JONES DAY
222 East 41st Street
New York, New York 10017-6702
(858) 314-1200